WHAT IS CLAIMED IS:

- A material for thin film encapsulating an organic or polymeric light emitting device, characterized in that said material comprises
- 5 poly(pentaerythrithol acrylate) resulted from the polymerization of pentaerythrithol acrylate monomer represented by the following formula I or II:

$$\begin{array}{c} \begin{matrix} R_{4} \\ R_{5} - C \\ R_{6} \end{matrix} \\ R_{6} \\ \end{array} \begin{array}{c} \begin{matrix} R_{1} \\ R_{2} \\ R_{3} \end{matrix}$$

(I)

wherein:

R1, R2. R3. R4. R5. and R6 are — CH₂-O-C-CH-CH₂; R1, R2, R3, R4, and R5 are — CH₂-O-C-CH-CH₂, and R6 is -CH2OH; R1, R2, R3, and R4 are — CH₂-O-C-CH-CH₂ and R5, and R6 are -CH2OH; R1, R2, and R3 are — CH₂-O-C-CH-CH₂, R4, R5, and R6 are -CH2OH; or R1, and R2 are — CH₂-O-C-CH-CH₂, R3, R4, R5, and R6 are -CH2OH:

(II)

wherein:

15

at least one of R7, R8, R9, and R10 is —CH₂-O-CH-CH₂, and the remainings are -CH2OH.

2. The material for thin film encapsulating an organic or polymeric light emitting device as claimed in claim 1, characterized in that said poly (pentaerythrithol acrylate) is homo-, 2-component co-, ter- or tetra-polymers consisting of 1 to 4 pentaerythrithol acrylate monomer represented by the following formula I or II.

5

15

20

- 3. The material for thin film encapsulating an organic or polymeric light emitting device as claimed in claim 1, characterized in that said material is physically mixed polymer blend further comprising polymers other than poly(pentaerythrithol acrylate).
- 10 4. The material for thin film encapsulating an organic or polymeric light emitting device as claimed in one of the claim 1, characterized in that said material further comprises at least on moisture absorbent selected from the group consisting of silica gel, zeolite, magnesium and alkali metal.
 - 5. The material for thin film encapsulating an organic or polymeric light emitting device as claimed in one of the claim 2, characterized in that said material further comprises at least on moisture absorbent selected from the group consisting of silica gel, zeolite, magnesium and alkali metal.
 - 6. The material for thin film encapsulating an organic or polymeric light emitting device as claimed in one of the claim 3, characterized in that said material further comprises at least on moisture absorbent selected from the group consisting of silica gel, zeolite, magnesium and alkali metal.
 - 7. A encapsulation method for an organic or polymeric light emitting device, comprising following steps:
 - (a) preparing a mixture of one to four pentaerythrithol acrylate monomer

represented by the following formula I or II and polymerization initiator, by mixing:

$$\begin{array}{c} R_{4} \\ R_{5} - \overset{R_{1}}{C} - CH_{2} - O - CH_{2} - \overset{R_{1}}{C} - R_{2} \\ R_{6} \\ \end{array}$$

5 wherein:

R1, R2, R3. R4. R5. and R6 are —CH₂·O—C·H—CH₂; R1, R2, R3, R4, and R5 are —CH₂·O—C·H—CH₂, and R6 is -CH2OH; R1, R2, R3, and R4 are —CH₂·O—C·H—CH₂ and R5, and R6 are -CH2OH; R1, R2, and R3 are —CH₂·O—C·H—CH₂, R4, R5, and R6 are -CH2OH; or R1, and R2 are —CH₂·O—C·H—CH₂. R3, R4, R5, and R6 are -CH2OH:

(I)

(II)

wherein:

at least one of R7, R8, R9, and R10 is CH₂O-CH-CH₂, and the remainings are -CH2OH;

- (b) coating said mixture on the surface of the organic or polymeric light emitting device by spin coating process, bar coating process, spreading process or simple immersion process; and,
- (c) polymerizing said monomer.
- 20 8. The encapsulation method for an organic or polymeric light emitting

device as claimed in claim 7, characterized in that said mixture further comprises polymers other than poly(pentaerythrithol acrylate).

- 9. The encapsulation method for an organic or polymeric light emitting device as claimed in claim 5, characterized in that said mixture further comprises at least on moisture absorbent selected from the group consisting of silica gel, zeolite, magnesium and alkali metal.
- 10. The encapsulation method for an organic or polymeric light emitting device as claimed in claim 6, characterized in that said mixture further comprises at least on moisture absorbent selected from the group consisting of silica gel, zeolite, magnesium and alkali metal.
- 11. A encapsulation method for an organic or polymeric light emitting device, comprising the steps:
- (a) preparing a mixture of one to four pentaerythrithol acrylate monomer represented by the following formula I or II and polymerization initiator, by mixing:

$$\begin{array}{c} R_{4} & R_{1} \\ R_{5}-C_{1}-C_{1}-C_{2}-C_{1}-C_{2} \\ R_{6} & R_{3} \end{array}$$

(I)

wherein:

5

10

15

R1, R2, R3, R4, R5, and R6 are —CH₂·O-Q-CH—CH₂; R1, R2, R3, R4, and R5 are —CH₂·O-Q-CH—CH₂, and R6 is -CH2OH; R1, R2, R3, and R4 are —CH₂·O-Q-CH—CH₂ and R5, and R6 are -CH2OH; R1, R2, and R3 are

-cH₂-O-C-CH-CH₂ , R4, R5, and R6 are -CH2OH; or R1, and R2 are -CH₂-O-C-CH-CH₂ , R3, R4, R5, and R6 are -CH2OH:

(II)

wherein:

- 5 at least one of R7, R8, R9, and R10 is —CH2-O-C-CH-CH2, and the remainings are -CH2OH;
 - (b) coating said mixture on the surface of the organic or polymeric light emitting device by physical vapor deposition method or chemical vapor deposition method; and,
- 10 (c) polymerizing said monomer.
 - 12. The encapsulation method for an organic or polymeric light emitting device as claimed in claim 11, characterized in that said mixture further comprises polymers other than poly(pentaerythrithol acrylate).